RESPONSE TO COMMENT ON VIMALANANDA ET AL.

Depressive Symptoms, Antidepressant Use, and the Incidence of Diabetes in the Black Women's Health Study. Diabetes Care 2014;37:2211–2217

Varsha G. Vimalananda[1] *and Edward A. Ruiz-Narváez*[2,3]

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Drs. Kivimäki and Singh-Manoux (1) comment on our recent article (2) about symptoms of depression, antidepressant use, and incident diabetes in U.S. black women. In particular, they raise the possibility that the reported association between antidepressant use and increased risk of type 2 diabetes (2) is not causal but rather due to detection bias (i.e., patients treated with antidepressants have more frequent visits to health care providers and therefore are more likely to be screened and diagnosed for diverse diseases including diabetes). We agree that our results may have a noncausal explanation; we controlled for health care utilization (and other factors) in our study but acknowledged that uncontrolled confounding could have contributed to the association. A recent systematic review found that there was evidence for antidepressant use as an independent risk factor, though the effect was small, with differences between individual drugs (3). Some preclinical and clinical data support a differential effect of various antidepressants on glucose homeostasis and insulin sensitivity; certain noradrenergic antidepressants are associated with hyperglycemia and increased sensitivity to endogenous counterregulatory hormones, while serotonergic antidepressants and other noradrenergic antidepressants are not (4). Assessment of the associations of specific medications with components of diabetes risk should help to elucidate the nature of the relationship between antidepressant use and diabetes.

Duality of Interest. No potential conflicts of interest relevant to this article were reported.

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[1]*Section of Endocrinology, Diabetes, and Nutrition, Boston University School of Medicine, Boston, MA*
[2]*Slone Epidemiology Center, Boston University, Boston, MA*
[3]*Department of Epidemiology, Boston University School of Public Health, Boston, MA*

Corresponding author: Varsha G. Vimalananda, varshav@bu.edu.